

## Environmental Protection Agency

## § 147.3009

### § 147.3006 Injection pressure for existing Class II wells authorized by rule.

(a) *Rule-authorized Class II saltwater disposal wells.* In addition to the requirements of § 144.28(f)(3)(ii) of this chapter, the owner or operator shall, except during well stimulation, use an injection pressure measured at the wellhead that is not greater than the pressure calculated by using the following formula:

$$P_m = 0.2d$$

where:

$P_m$ =injection pressure at the wellhead in pounds per square inch

$d$ =depth in feet to the top of the injection zone.

Owners and operators shall comply with this requirement no later than one year after the effective date of this program.

(b) *Rule-authorized Class II enhanced recovery and hydrocarbon storage wells.*

(1) In addition to the requirements of § 144.28(f)(3)(ii) of this chapter, owners and operators shall use an injection pressure no greater than the pressure established by the Director for the field or formation in which the well is located. The Director shall establish such maximum pressure after notice (including notice to the affected Tribe), opportunity for comment, and opportunity for public hearing according to the provisions of part 124, subpart A, of this chapter, and shall inform owners and operators and the affected Tribe in writing of the applicable maximum pressure; or

(2) An owner or operator may inject at a pressure greater than that specified in paragraph (b)(1) of this section for the field or formation in which he is operating after demonstrating in writing to the satisfaction of the Director that such injection pressure will not violate the requirements of § 144.28(f)(3)(ii) of this chapter. The Director may grant such a request after notice (including notice to the affected Tribe), opportunity for comment and opportunity for a public hearing according to the provisions of part 124, subpart A of this chapter.

(3) Prior to the time that the Director establishes rules for maximum injection pressure under paragraph (b)(1)

of this section the owner or operator shall:

(i) Limit injection pressure to a value which will not exceed the operating requirements of § 144.28(f)(3)(ii); and

(ii) Submit data acceptable to the Director which defines the fracture pressure of the formation in which injection is taking place. A single submission may be made on behalf of two or more operators conducting operations in the same field and formation, if the Director approves. The data shall be submitted to the Director within one year of the effective date of this program.

### § 147.3007 Application for a permit.

(a) Notwithstanding the requirements of § 144.31(c)(1) of this chapter, the owner or operator of an existing Class I or III well shall submit a complete permit application no later than 90 days after the effective date of the program.

(b) The topographic map (or other map if a topographic map is unavailable) required by § 144.31(e)(7) of this chapter, shall extend two miles from Class II wells, and 2½ miles from Class I and III wells. These maps will show all the information listed in paragraph 144.31(e)(7) within ½ mile for Class II wells and 2½ miles for Class I and III wells.

### § 147.3008 Criteria for aquifer exemptions.

The aquifer exemption criterion in § 146.4(c) of this chapter shall not be available for this program.

### § 147.3009 Area of review.

The area of review shall be defined as follows:

(a) *Class II wells.* The area of review for Class II permits and area permits shall be defined by a fixed radius as described in § 146.6(b) (1) and (2) of this chapter except that the radius shall be one-half mile.

(b) *Class I and III wells.* The area of review for Class I and III wells are well fields which may be either:

(1) An area defined by a radius two and one-half miles from the well or well field; or

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(2) An area one-quarter mile from the well or well field where the well field production at the times exceeds injection to produce a net withdrawal; or

(3) A suitable distance, not less than one-quarter mile, proposed by the owner or operator and approved by the Director based upon a mathematical calculation such as that found in § 146.6(a)(2) of this chapter.

#### § 147.3010 Mechanical integrity tests.

The monitoring of annulus pressure listed in § 146.8(b)(1) of this chapter will only be acceptable if preceded by a pressure test, using liquid or gas that clearly demonstrates that mechanical integrity exists at the time of the pressure test.

#### § 147.3011 Plugging and abandonment of Class III wells.

To meet the requirements of § 146.10(d) of this chapter, owners and operators of Class III uranium projects underlying or in aquifers containing up to 5,000 mg/l TDS which have been exempted under § 146.4 of this chapter shall:

(a) Include in the required plugging and abandonment plan a plan for aquifer clean-up and monitoring which demonstrates adequate protection of surrounding USDWs.

(1) The Director shall include in each such permit for a Class III uranium project the concentrations of contaminants to which aquifers must be cleaned up in order to protect surrounding USDWs.

(2) The concentrations will be set as close as is feasible to the original conditions.

(b) When requesting permission to plug a well, owners and operators shall submit for the Director's approval a schedule for the proposed aquifer cleanup, in addition to the information required by § 146.34(c).

(c) Cleanup and monitoring shall be continued until the owner or operator certifies that no constituent listed in the permit exceeds the concentrations required by the permit, and the Director notifies the permittee in writing that cleanup activity may be terminated.

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#### § 147.3012 Construction requirements for Class I wells.

In addition to the cementing requirement of § 146.12(b) of this chapter, owners and operators of Class I wells shall, through circulation, cement all casing to the surface.

#### § 147.3013 Information to be considered for Class I wells.

(a) In addition to the information listed in § 146.14(a) of this chapter, the Director shall consider the following prior to issuing any Class I permit:

(1) Expected pressure changes, native fluid displacement, and direction of movement of the injected fluid; and

(2) Methods to be used for sampling, and for measurement and calculation of flow.

(b) In addition to the information listed in § 146.14(b) of this chapter, the Director shall consider any information required under § 146.14(a) of this chapter (as supplemented by this subpart) that has been gathered during construction.

#### § 147.3014 Construction requirements for Class III wells.

(a) In addition to the requirements of § 146.32(c)(3) of this chapter, radiological characteristics of the formation fluids shall be provided to the Director.

(b) In addition to the requirements of § 146.32(e) of this chapter, the Director may require monitoring wells to be completed into USDWs below the injection zone if those USDWs may be affected by mining operations.

#### § 147.3015 Information to be considered for Class III wells.

(a) In addition to the requirements of § 146.34(a) of this chapter, the following information shall be considered by the Director:

(1) Proposed construction procedures, including a cementing and casing program, logging procedures, deviation checks, and a drilling, testing and coring program.

(2) Depth to the proposed injection zone, and a chemical, physical and radiological analysis of the ground water in the proposed injection zone sufficient to define pre-injection water quality as required for aquifer cleanup by § 147.3011 of this subpart.